Test Type: 14-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 10/21/2014 AVERAGE SEVERITY GRADES[b]

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Lab: MBA

Time Report Requested: 18:15:12

First Dose M/F: NA / NA

C Number: C99007

Lock Date: 10/11/2001

Cage Range: ΑII

Date Range: ΑII

Reasons For Removal: ΑII

Removal Date Range: ΑII

Treatment Groups: ΑII

Study Gender: Both

PWG Approval Date NONE

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: DOSED FEED

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 18:15:12

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Time Report Requested: 18:15:12

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat MALE	VEHICLE CONTROL	1560 PPM	3121 PPM	6250 PPM	12500 PPM	25000 PPM
Disposition Summary						
Animals Initially In Study	5	5	5	5	5	5
Early Deaths						
Survivors						
Terminal Sacrifice	5	5	5	5	5	5
Animals Examined Microscopically	5		1		5	5
ALIMENTARY SYSTEM						
Liver	(5)	(0)	(1)	(0)	(5)	(5)
Centrilobular, Hepatocyte, Hypertrophy						3 [1.0]
Centrilobular, Hepatocyte, Vacuolization Cytoplasmic	5 [2.0]				3 [1.3]	
Hepatodiaphragmatic Nodule			1 [2.0]			
CARDIOVASCULAR SYSTEM						
None					,	
ENDOCRINE SYSTEM						
None						
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
None						
HEMATOPOIETIC SYSTEM						
None						
INTEGUMENTARY SYSTEM						
None						

MUSCULOSKELETAL SYSTEM

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: 14-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 18:15:12

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Time Report Requested: 18:15:12

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat MALE	VEHICLE CONTROL	1560 PPM	3121 PPM	6250 PPM	12500 PPM	25000 PPM
None						
NERVOUS SYSTEM None						
RESPIRATORY SYSTEM None						
SPECIAL SENSES SYSTEM None						
URINARY SYSTEM None						

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: 14-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 18:15:12

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Time Report Requested: 18:15:12

First Dose M/F: NA / NA

Lab: MBA

Disposition Summary	
Disposition outlinary	
Animals Initially In Study	5
Early Deaths	
Survivors	
Terminal Sacrifice	5
Animals Examined Microscopically	5
ALIMENTARY SYSTEM	
Liver	(5)
Centrilobular, Hepatocyte, Hypertrophy	5 [2.6]
Centrilobular, Hepatocyte, Vacuolization Cytoplasmic	
Hepatodiaphragmatic Nodule	
CARDIOVASCULAR SYSTEM	
None	
ENDOCRINE SYSTEM	
None	
GENERAL BODY SYSTEM None	
GENITAL SYSTEM	
None	
HEMATOPOIETIC SYSTEM	
None	
INTEGUMENTARY SYSTEM None	

MUSCULOSKELETAL SYSTEM

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: 14-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Date Report Requested: 10/21/2014
Time Report Requested: 18:15:12

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Time Report Requested: 18:15:12

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat MALE	50000	PPM
None		
NERVOUS SYSTEM None		
RESPIRATORY SYSTEM None		
SPECIAL SENSES SYSTEM None		
URINARY SYSTEM None		

END OF MALE DATA

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: 14-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 18:15:12

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Time Report Requested: 18:15:12

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat FEMALE	VEHICLE CONTROL	1560 PPM	3121 PPM	6250 PPM	12500 PPM	25000 PPM
Disposition Summary						
Animals Initially In Study Early Deaths Survivors	5	5	5	5	5	5
Terminal Sacrifice	5	5	5	5	5	5
Animals Examined Microscopically	5	1			5	5
ALIMENTARY SYSTEM Liver Centrilobular, Hepatocyte, Hypertrophy	(5)	(1)	(0)	(0)	(5)	(5) 5 [1.0]
Hepatodiaphragmatic Nodule		1 [1.0]			1 [2.0]	0[0]
CARDIOVASCULAR SYSTEM None						
ENDOCRINE SYSTEM None						
GENERAL BODY SYSTEM None						,
GENITAL SYSTEM None						
HEMATOPOIETIC SYSTEM None						
INTEGUMENTARY SYSTEM None						
MUSCULOSKELETAL SYSTEM None						

NERVOUS SYSTEM

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: 14-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 18:15:12

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Time Report Requested: 18:15:12 First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat FEMALE	VEHICLE CONTROL	1560 PPM	3121 PPM	6250 PPM	12500 PPM	25000 PPM
None						
RESPIRATORY SYSTEM None						
SPECIAL SENSES SYSTEM None						
URINARY SYSTEM None						

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: 14-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/21/2014 Time Report Requested: 18:15:12

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Time Report Requested: 18:15:12

First Dose M/F: NA / NA

Lab: MBA

	•
F 344/N Rat FEMALE	50000 PPM
Disposition Summary	
Animals Initially In Study Early Deaths Survivors	5
Terminal Sacrifice	5
Animals Examined Microscopically	5
ALIMENTARY SYSTEM Liver Centrilobular, Hepatocyte, Hypertrophy Hepatodiaphragmatic Nodule	(5) 5 [2.2]
CARDIOVASCULAR SYSTEM None	
ENDOCRINE SYSTEM None	
GENERAL BODY SYSTEM None	
GENITAL SYSTEM None	
HEMATOPOIETIC SYSTEM None	
INTEGUMENTARY SYSTEM None	
MUSCULOSKELETAL SYSTEM None	

NERVOUS SYSTEM

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: 14-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Date Report Requested: 10/21/2014
Time Report Requested: 18:15:12

Test Compound: Goldenseal root powder **CAS Number:** GOLDENSEALRT

Time Report Requested: 18:15:12

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat FEMALE	50000	PPM
None		
RESPIRATORY SYSTEM None		
SPECIAL SENSES SYSTEM None		
URINARY SYSTEM None		

** END OF REPORT **

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)